

Claims

- ✓
- 5
Sub B1
- 10
- 15
Sub B2
- 20
- 25
1. A method of removing an N-terminal alanyl group from a recombinant protein which comprises contacting said recombinant protein with *Aeromonas* aminopeptidase such that said N-terminal alanyl group is removed and recovering the resulting recombinant protein.
 2. A method of claim 1 wherein said recombinant protein is of eukaryotic origin.
 3. A method of claim 2, wherein said recombinant protein is selected from the group consisting of human growth hormone (HGH), bovine somatotropin (bST), porcine somatotropin (pST), and human tissue factor pathway inhibitor (TFPI).
 4. A method of claim 1, wherein said contacting is carried out at a pH from about pH 7 to about pH 11.
 5. A method of claim 4, wherein said contacting is carried out at a pH ~~from~~ about pH 8 to about pH 10.
 6. A method of claim 5, wherein said contacting is carried out at a pH of about pH 8.0 to about pH 9.5.
 7. A method of claim 1, wherein said contacting is carried out in the presence of a buffer selected from the group consisting of borate, CHES, sodium bicarbonate, sodium phosphate, and Tris-HCl.
 8. A method of claim 7, wherein said buffer is borate.
 9. A method of claim 7, wherein said buffer is sodium phosphate.
 10. A method of claim 7, wherein said buffer is Tris-HCl.
 11. A method of claim 1, wherein said aminopeptidase is immobilized.
 12. A method of claim 11, wherein said aminopeptidase is immobilized on a chromatography resin, chromatography surface, or chromatography gel.

5
Sub
B3

10

15

20

13. A method of claim 12 wherein said recombinant protein is passed through a column containing said aminopeptidase immobilized on a chromatography resin.
14. A method of claim 1, wherein said aminopeptidase is not immobilized (carried out in free solution).
15. A recombinant protein lacking an N-terminal alanine prepared by the method of claim 1.
16. A method of removing amino-terminal amino acids from a precursor polypeptide of the formula X-Y-Pro-Z with *Aeromonas* aminopeptidase to yield a polypeptide of the formula Y-Pro-Z, wherein X is one or more amino acids except proline, Y is any amino acid except proline, and Z is one or more amino acids.
17. The method of claim 16 wherein X is alanine.
18. The method of claim 16 wherein Y is selected from the group consisting of phenylalanine, methionine, threonine, and aspartic acid.
19. The method of claim 18, wherein Y is phenylalanine.
20. The method of claim 16, wherein X is alanine and Y is phenylalanine.
21. The method of claim 19 or claim 20, wherein the precursor polypeptide is Ala-hGH.

add
C1